



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,789	02/14/2002	Xiaoqi Zhou	22397.312	2197

27683 7590 06/27/2005

HAYNES AND BOONE, LLP  
901 MAIN STREET, SUITE 3100  
DALLAS, TX 75202

EXAMINER

DANG, DUY M

ART UNIT PAPER NUMBER

2621

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/683,789

Applicant(s)

ZHOU ET AL.

Examiner

Duy M. Dang

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 16-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's election with traverse of species of figure 8, claims 11-15 filed 3/11/05 is acknowledged. Because applicant did not distinctly and specifically point out (1)the supposed errors in the restriction requirement, and (2)what grounds applicant's traversal is based on, applicant's election is considered as an incomplete reply which fails to comply with the requirement of 37 CFR § 1.111. Therefore, applicant's election is considered as an election without traverse (MPEP § 818.03(a)). Furthermore, claims 1-10 and 16-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant's amendment to cancel claims 1-10 and 16-33 is advised in response to this office action.

### ***Drawings***

3. The drawings are objected to because:

The descriptive labels are not consistent with what the instant specification describes, for example, the "fundamental shapes" illustrated in figure 8 and the "fundamental elements" described in the specification, page 10 last two lines that of "step 82 by identifying the fundamental elements of the design".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

Art Unit: 2621

should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

4. The disclosure is objected to because of the following informalities: table 1 is not included in page 15; and the “library 82” in line 3 of page 11 ought to be changed to “library 92”.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 11-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

Art Unit: 2621

art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In this case, claim 11 recites “comparing discrete portions of the design to a library containing the fundamental shapes.” This claimed feature is not found support by the instant specification. It is noted the instant specification does mention “comparing” (see page 11 line 10). However, such comparing is used for “comparing each element to the design itself” (see page 11 line 10). Such comparing is not the same the claimed comparing. In addition, figure 8 of the instant invention does mention the claimed “shapes”, but it does not describe the claimed “comparing discrete portions of the design to a library containing the fundamental shapes”.

Dependent claims 12-15 are also are rejected for the same reasons as above.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa [WO 00/03307].

Regarding claim 1, Ishikawa teaches:

identifying a plurality of fundamental shapes occurring in the design by comparing discrete portions of the design to a library containing the fundamental shapes [see pattern generator 38 and computer aided pattern design system 36 shown in figure 2];

Art Unit: 2621

extracting the fundamental shapes from the design [see “appropriate mask pattern signal information provided to pattern generator 38 via line 37 according to figure 2 and page 5 lines 8-11]; and

transferring the extracted fundamental shapes for projection in the imaging system [see transferring mentioned in page 7 line 7].

Regarding claim 12, Ishikawa further teaches reconstructing the design from the transferred fundamental shapes [see page 6 lines 1-2: creation of mask pattern information for a desired mask pattern].

Regarding claim 13, Ishikawa further teaches adding the extracted fundamental shapes to a list and transferring the list [see page 6 lines 3-7 and figure 3: collection of mask pattern information stored memory as a bit map 35 and transferred to pattern generator 38].

Regarding claim 15, Ishikawa further teaches dividing the fundamental shapes and list into a plurality of portion [see item 35 shown in figure 3] and transferring the plurality of portion to a plurality of driver for projection [see panel 38 shown in figure 3 in together with page 30 lines 4-19].

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Earl et al. [US Patent No. 5,231,663}, Takeda [US Patent No. 6,061,118], Mumola [EP 0552953A1] are the examples of the same field of invention.

Art Unit: 2621

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 5:30AM to 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 571-272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmd  
6/05



Duy M. Dang  
Patent Examiner